AF/3721 IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

ANDREW PERKINS, ET AL.

Serial No. 10/087,897

Filed: March 1, 2002

For: METHODS AND APPARATUS FOR

INFLATING AND SEALING PILLOWS IN PACKAGING

September 15, 2004

Group Art Unit: 3721

Examiner: Louis K. Huynh

TRANSMITTAL OF REPLY BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Transmitted herewith (in triplicate) is applicant's Reply Brief.

The Commissioner is authorized to charge any fees required to Deposit Account 50-2975, Order No. A-71304.

Respectfully submitted,

(650) 330-0830

CERTIFICATE OF MAILING

I hereby certify that this communication and the attached Reply Brief (in triplicate) are being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 15, 2004.

Edward S. Wrig

4-71304 ESW



In re application of:

ANDREW PERKINS, ET AL.

Serial No. 10/087,897

Filed: March 1, 2002

For: METHODS AND APPARATUS FOR

INFLATING AND SEALING PILLOWS IN PACKAGING

Examiner: Louis K. Huynh

Group Art Unit: 3721

September 15, 2004

REPLY BRIEF

Edward S. Wright 1100 Alma Street, Suite 207 Menlo Park, CA 94025 (650) 330-0830 (Telephone) (650) 330-0831 (Facsimile) twright@claim1.com Applicant responds as follows to the new points of argument made in the Examiner's Answer.

Combination of References

The Examiner is mistaken in suggesting that Simhaee (U.S. 6,423,166) and Skalsky et al. (U.S. 4,936,079) are in the same field of endeavor. One is concerned with an inflated cellular dunnage material and a method of making the same, and the other is concerned with a support for a roll of wrapping material. The wrapping material is positioned beneath a wrapping table or platform and supported by braking rollers which are intended to tension the material in the manner required for wrapping applications. This mechanism has no application to the inflation and sealing of air-filled packing cushions, and there is no basis or motivation for combining selected elements from the two references in the manner suggested by the Examiner.

Moreover, the Examiner cannot create the missing motivation by arguing that the wrapping table reference teaches that mounting the wrapping material on rollers permits easy replacement of the roll of material. That argument would apply to anything.

Arrangement of Machine Elements

As pointed out in applicant's opening brief, an important and novel aspect of the invention is the arrangement of the elements in which the roll of film material rests on the rollers above the inflation tube and the tube extends in a upward direction for injecting air to inflate the cushions, with means for feeding the material in a generally downward direction from the roll to the inflation tube. The Examiner admits that this arrangement is not taught by the references:

However, the combination of the Simhaee and Skalsky references has met the claimed subject matter as claimed in Claims 1, 4 and 7 except for the specific arrangement of the machine elements. (Examiner's Answer, Page 5, lines 16 - 18)

But rather than allowing the claims which are directed to this admittedly novel subject matter, the Examiner goes on to make the specious argument that the showing in Simhaee is schematic and that it is applicable to a machine having its elements arranged either horizontally or vertically. The problem with that argument, of course, is that it is not what the reference teaches. It is just an argument which the Examiner has concocted to suit the moment. In order to sustain his position, the Examiner would have to establish the obviousness of turning the elements shown in Simhaee the right way, importing the roll support from the non-analogous wrapping table reference, and then positioning the roll in the proper relationship to the other elements of the machine. That he has not done and cannot do.

Sealing Assembly

In arguing that Larson et al. (U.S. 4,017,351) teaches the use of a stainless steel belt 44 in combination with a wheel 40 for sealing the inlet openings of a film material, the Examiner has failed to consider what the claims actually call for. Claims 2 and 5 call for a cylindrical heating element and a wheel which are urged together, with the axis of the heating element being perpendicular to the axis of the wheel and the heating element being exposed for direct contact with the film material. The belt of Larson et al. is not a cylindrical heating element, nor is it even remotely suggestive of such an element, and the axis of the belt is parallel to the axis of the wheel, rather than being perpendicular as specified by the claim. Claims 3 and 6 depend from Claims 2 and 3 and further distinguish in specifying that the heating element comprises a stainless steel rod, which the Examiner acknowledges is not found in the references.

Moreover, contrary to the Examiner's suggestion, this is not just a difference in the shape of the heating element. It is a totally new and different type of sealing assembly, and it has significant advantages over the prior art. As pointed out in the paragraph bridging Pages 6 and 7 of applicant's specification, with the stainless steel rod and the wheel and the axes of the two being perpendicular to each other, the curved surfaces of the heating element and the roller come together at a very small point, so that a given point on the film material is in contact with the heating element for only about one millisecond. With that brief contact, higher heating element temperatures can be used, which results in better seals than are possible with the prior art.

It should also be noted that the belt in Larson et al. has a Teflon coating, and that Larson et al. does not in any way teach or suggest the use of a stainless steel heating element in direct contact with the film material, as specified by the claims.

Pinching of Inflation Channel

In addition to distinguishing over the prior art for the same reasons as their parent claims, Claims 16, 17, 19 and 20 further distinguish in specifying that the inflation channel in the film material is pinched closed by one of the rollers which support the roll of material, and the injector is positioned for injecting air into the inflation channel in a portion of the material which has been withdrawn from the roll, with the air in the inflation channel flowing around the roll only to the point where the channel is pinched closed by the roller.

Even though that relationship is not even remotely suggested by the references, the Examiner, in effect, argues that it would be inherent if the roll support of the wrapping table reference were combined with the other elements of the dunnage material patent. But where is the motivation for doing so? Neither reference even

recognizes the problem of backfilling of the material on the roll, and neither addresses it or its solution. There is no suggestion of blocking the inflation channel in a roll of inflatable cushioning material or positioning an injector so that the air injected into the channel flows around the roll only to the point where the channel is pinched closed.

Claims 17 and 20 further distinguish in specifying that the film material is withdrawn from the roll about 90 to 180 degrees from the point where the inflation channel is pinched closed by the roller. Here again, rather than addressing what the claims call for, the Examiner refers to a material being drawn directly from a nip and then makes some obscure (and irrelevant) argument about it being an obvious matter of "engineering design choice" to have placed the roll "in either position".

The Examiner is also mistaken in trying to justify ignoring an express limitation of the claims by arguing that the placement of the roll on the support rollers does not offer to solve any stated problem. In that regard, the paragraph at Page 8, lines 9 - 20 of the specification clearly points out that with the film material being withdrawn from the roll about 90 to 180 degrees from the point where the inflation channel is pinched closed, the cushions are inflated more efficiently and more uniformly than in systems where the air diffuses into substantial portions of the film material upstream of the filling and sealing units.

Claims 13 - 15

Rather than actually addressing Claims 13 - 15 or considering any of the elements set forth in them, the Examiner has simply suggested that the subject matter of those claims can be found in Claims 1 - 4. That is outrageous, and it suggests that the Examiner has not even bothered to read those claims.

Claim 13 distinguishes initially over the references (and differs from Claims 1 - 4) in that it is directed to a table-top machine. It further distinguishes and differs in calling for a cabinet which is adapted to rest on a relatively small horizontal supporting surface, a pair of spaced apart, horizontally extending rollers on the upper side of the cabinet for receiving the roll of film material, a feed mechanism positioned toward the front of the cabinet for withdrawing the film material from the roll in a downward direction, an inflation tube extending in an upward direction from the feed mechanism, and a source of air within the cabinet connected to the inflation tube. That combination of elements is not even remotely suggested by the references.

Claims 14 and 15 depend from Claim 13 and distinguish over the references for the same reasons as their parent claim. In addition, they call for the novel sealing assembly which, as discussed above, is not even remotely suggested by the references.

SUMMARY AND CONCLUSION

For the reasons set forth above and in applicant's opening brief, it is once again respectfully submitted that the rejections which the Examiner has made cannot be sustained and that the action of the Examiner should be reversed.

Respectfully submitted,

Edward S. Wright Reg. No. 24,903

Law Offices of Edward S. Wright 1100 Alma Street, Suite 207 Menlo Park, CA 94025 (650) 330-0830 (Telephone) (650) 330-0830 (Facsimile) twright@claim1.com